



Zenker's Honeyguide *Melnomom zenkeri* caught at Mount Kupe, Cameroon in November 1992 (Barbara Woodcock)
Indicateur de Zenker Melnomom zenkeri capturé au mont Kupé, Cameroun, novembre 1992 (Barbara Woodcock)



Mount Kupe Bush-shrike *Malaconotus kupeensis*, known only from Mount Kupe in Cameroon (Nick Gibbons)
Gladiateur du mont Kupé Malaconotus kupeensis, connu que du mont Kupé au Cameroun (Nick Gibbons)

The *Melignomon* honeyguides:

a review of recent range extensions and some remarks on their identification, with a description of the song of Zenker's Honeyguide

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Résumé: D'importantes extensions des aires de distribution sont rapportées pour les deux espèces de *Melignomon*, l'indicateur de Zenker *Melignomon zenkeri* et l'indicateur d'Eisentraut *M. eisentrauti*; ces nouvelles données suggèrent une éventuelle sympatrie au Cameroun occidental. Les observations connues sont récapitulées. L'expérience gagnée sur le terrain et l'examen des peaux provenant de musées sont combinés pour identifier quelques caractères utiles sur le terrain; ceux-ci sont illustrés. Le proéminence du blanc sur le dessous de la queue constitue probablement le critère le plus utile pour distinguer les deux espèces. Le chant de l'indicateur de Zenker est décrit pour la première fois (avec sonogrammes) et des notes sont fournies sur l'habitat et le comportement des espèces.

Both species of *Melignomon* honeyguide, Yellow-footed *Melignomon eisentrauti* and Zenker's *M. zenkeri*, are rare and very poorly known. Yellow-footed is classified as 'Vulnerable' in *Birds to Watch* 2¹. The aims of this paper are to present recent information on the distribution and habitat of both species, to summarise published and unpublished records and to discuss characters useful for field identification. The song of Zenker's Honeyguide is described for the first time.

The article is based on our field observations of Yellow-footed Honeyguide in Sierra Leone, during the Gola Forest Project², and of Zenker's Honeyguide on Mount Kupe, Cameroon, both in the field and in the hand, as part of the BirdLife Mount Kupe Forest Project³. We also examined 12 skins of Yellow-footed and six skins of Zenker's Honeyguides at the British Museum (Natural History), Tring.

Previous records of *Melignomon* species

Zenker's Honeyguide was described in 1898 by Reichenow⁴ from Yaoundé, Cameroon, while Yellow-footed Honeyguide was only described as recently as 1981 from Mount Nimba, Liberia^{5,6}. The two species are sufficiently similar in size, general body structure and bill structure that Serle, who collected a Yellow-footed Honeyguide near Mamfe, Cameroon (see Appendix for details), thought the specimen was an immature Zenker's⁷ and Eisentraut⁸ made a similar error with a specimen collected on Mount Cameroon. Yellow-footed was unknown at the time and, indeed, remained so in specimen drawers for 25 years before being recognised.

The locations of all published and unpublished records of both species which we have been able to trace are given in the Appendix and shown in Figure 1.



Little Greenbul *Andropadus virens* (above) and Zenker's Honeyguide *Melignomon zenkeri* (below)
By Martin Woodcock

We describe as recent those records not included in Fry *et al*⁹.

The recent records extend the range of Yellow-footed Honeyguide 350 km westwards - from Nimba to Gola - confirming, as Colston⁵ suggested, that it is more widely distributed within the Upper Guinea forest block than previously recorded.

It is worth noting in passing that Yellow-footed Honeyguide has not yet been confirmed as occurring in Côte d'Ivoire but there have been several sightings of



Figure 1 All known site locations of *Melignomon* honeyguides. Zenker's Honeyguide *M. zenkeri* = circles. Yellow-footed Honeyguide *M. eisenrauti* = squares. Solid symbols indicate recent records (those not included in Fry *et al.*⁹) and grey symbols previous records.

Figure 1 Localisations des sites connus des indicateurs *Melignomon*. Indicateur de Zenker *M. zenkeri* = cercles. Indicateur d'Eisenraut *M. eisenrauti* = carrés. Les symboles noirs indiquent les observations récentes (non-inclues dans Fry *et al.*⁹); les symboles gris les observations antérieures

birds which were very probably of this species in Taï forest in the south-west of the country near the Liberian border^{10,11,12}.

Records of Yellow-footed Honeyguide from Babeke and Malende, and Zenker's from both the latter locality and Mount Kupe, all in Cameroon, suggest that the ranges of these species might not be allopatric; but the small number of records prevents a firm conclusion. Note that the undated and otherwise unsubstantiated observation (by Forbes-Watson) of Zenker's from Malende¹³ was not included in Fry *et al.*⁹.

Habitat and behaviour

Little information is available in the literature on the habitat of either *Melignomon* species, apart from statements that Zenker's occurs in lowland forest up to 1530 m in Zaïre¹⁴ and Yellow-footed is capable of surviving in secondary forest¹³. There are too few records of either species to infer their altitudinal preferences.

Yellow-footed Honeyguide

A single bird was seen three times by PVH and PR in lowland forest between 23 and 25 February 1989, for a total of almost one hour. It was always seen in the same tree where it perched or foraged in the branches of the middle and upper storeys never descending below 15m. It kept mostly to the smaller branches and appeared to be gleaning small insects, occasionally hanging upside down in the manner of a sunbird whilst searching leaves. On one occasion it kept close company with an *Andropadus* greenbul, probably Ansonge's Greenbul *A. ansongei*, otherwise it was always alone. This is interesting given a similar observation of Zenker's Honeyguide spending several minutes in very close proximity to a Little Greenbul *Andropadus virens* in Cameroon (TB Smith pers comm.), although the significance of this behaviour is unclear.

Zenker's Honeyguide

Four birds have been seen at three sites, all within an area of 4 km², at altitudes between 900 m and 1150 m on Mount Kupe, within three km of the village of Nyasoso in south-west Cameroon (see Appendix). At these elevations on Mount Kupe, the forest is predominantly lowland in character with a high canopy, sparse understorey and moderate development of epiphytes¹⁵. A bird found three km east of Nyasoso on 21 October 1991 by CGRB, RPM, SHM, IJ Abramson and M Mudd, was on a ridge supporting primary forest but bordered nearby by secondary forest and was 500 m from the nearest cultivation. A second site lies in 'farm-bush', a mosaic of cultivation and secondary forest, where cocoyams and plantains are grown in a dense herb layer but retaining 70 per cent forest canopy cover. A third site, at which a bird was trapped on 24 November 1992, was in disturbed forest, intermediate in character between the habitat at the other sites.

The bird trapped at Mount Kupe behaved remarkably when in the hand by persistently twisting its head to one side of the body whilst its tail was partly fanned and twisted in the opposite direction. It continuously alternated with movements of both head and tail from one side of the body to the other. This might have been induced by stress, and resembles the behaviour of Wryneck *Jynx torquilla* and European Kingfisher *Alcedo atthis* when in the hand (CGRB).

Brood parasitism

It has been assumed that both these honeyguides are brood parasites of birds such as barbets (Capitonidae)^{16,9}, but this remains unconfirmed. On 26 November 1992 MWW saw a Zenker's Honeyguide on Mount Kupe perched below the canopy of a tree about 15m tall. About 10m away, at the same height, was a tall dead stump containing the nests of three to four pairs of Naked-faced Barbets *Gymnobucco calvus* of which at



MHWoodcock

least one pair was feeding young. The honeyguide appeared to be interested in the barbet nests, and after a few minutes it was chased to an adjacent tree by two of the adult barbets.

Food

It is debatable whether either species shows any strong association with bees and bees wax. This topic has been discussed by Friedmann¹⁶, who also reported the presence of 'pupae' and newly emerged adult scale insects (Coccoidea) in the stomach contents of Zenker's and used this evidence to liken *Melignomon* more closely to *Prodotiscus* than to *Indicator* honeyguides. None of our own observations has indicated any association with bees, but the 1993 Lake Lobeke record of Zenker's was of a bird caught near a recently harvested bees' nest, to which other honeyguide species were attracted¹⁷.

Field identification

Separation of Melignomon honeyguides from greenbuls and other honeyguides

Given a brief view in the field, especially when foraging, *Melignomon* honeyguides are surprisingly similar in appearance to some of the smaller greenbuls (Pycnonotidae) - especially those of the genus *Andropadus* - in general coloration, size, shape and also in bill-structure. However, there are several clear differences. *Melignomon* honeyguides, although similar in length, look distinctly shorter-tailed than greenbuls and their tails are clearly graduated, unlike any greenbul. Furthermore, the outer four pairs of tail feathers show substantial areas of white or greyish-white, not shown by any *Andropadus* greenbul, although this can often be difficult to discern in the field on Zenker's making it appear very much like a Little Greenbul *Andropadus virens*. Another feature common to both species of *Melignomon* is yellow or yellowish-flesh legs and feet. The song of Zenker's is distinctive (see later in this article) and, moreover, the upright singing posture of Zenker's is quite unlike that of any greenbul. The song of Yellow-footed Honeyguide is unknown.

Plate 4

Zenker's *Melignomon zenkeri* and Yellow-footed Honeyguides *M. eisentrauti* illustrating the differences detailed in the text. Zenker's: upper two birds. Yellow-footed: lower two birds. Half tails viewed from below are: Zenker's on the left and Yellow-footed to the right.

L'indicateur de Zenker Melignomon zenkeri (les deux oiseaux en haut) et l'indicateur d'Eisentraut M. eisentrauti (les deux oiseaux en bas) illustrant les différences spécifiées dans le texte. Demi-queues vues de dessous: à gauche celle de l'indicateur de Zenker, à droite celle de l'indicateur d'Eisentraut.

By Martin Woodcock

The only potentially confusing species of greenbul, which show white in the tail, are Honeyguide Greenbul *Baeopogon indicator* and Sjöstedt's Honeyguide Greenbul *B. clamans*. Both are larger, longer tailed in relation to body length and with ungraduated tails. In addition, Honeyguide Greenbul has white irides and Sjöstedt's Honeyguide Greenbul has a distinctly buffish coloration to its underparts.

The three other genera of honeyguide, which all share similar coloration and tail length, can be separated from *Melignomon* most readily on bill size and structure;

- *Prodotiscus* (honeybirds) are distinctly smaller and have considerably finer bills giving them a superficially warbler-like appearance;
- all the members of the genus *Indicator*, although of varying sizes, have distinctly deeper, heavier, more finch-like bills and some of them also show dark moustachial marks;
- Lyre-tailed Honeyguide *Melichneutes robustus* is larger, has a heavier bill and has several of the outer rectrices splayed out to form its distinctive excurved tail.

Separation of Zenker's from Yellow-footed Honeyguide

These two honeyguides are undoubtedly difficult to separate but the general plumage coloration, soft-part colours and, in particular, tail pattern, especially on the underside (see Plate 4 and photo of Zenker's Honeyguide) are the features to check.

General plumage coloration

Zenker's has a dark grey head with olive on the forehead, crown and nape, while head coloration in Yellow-footed is paler grey, showing brighter olive-green on the crown and nape. The underparts of Yellow-footed are pale ash-grey fading to off-white on the vent and undertail coverts. This latter feature was notable in the field. In museum specimens there is a greenish wash across the upper breast but this was not noticed on the bird seen in Gola. In Zenker's the underparts are a dull olivaceous-grey and are relatively uniform down to the undertail coverts, although the throat, undertail coverts and centre of belly can appear slightly paler.

In the field, the upperparts of Yellow-footed look predominantly brighter and more lime-green than Zenker's, in which the upperparts appear brown with olive feather-edgings giving a slightly streaked appearance. In both species the mantle, wing coverts and remiges are brown with olive edges. In Zenker's, the edges are narrow and quite dull, whilst in Yellow-footed, they are considerably broader and brighter, almost lime-green in colour, giving an overall fresher, paler look which in good light conditions is a useful feature.

Bare parts coloration

The bill of Zenker's is consistently darker, more grey-brown, even blackish, while in Yellow-footed it is apparently more variable, straw-coloured, brown or yellowish, although these differences can be surprisingly difficult to see in the field. The legs and feet are variable, from brownish-yellow to golden-yellow in Yellow-footed and dull pinkish-yellow or greenish-yellow in Zenker's. The duller bare-parts recorded for Yellow-footed are likely to refer to immature birds, for which there is very limited information.

Tail pattern

The illustrations in Fry *et al*⁹ (currently the only reference to depict both species together) do not show the underside of the tail, which has important identification features, and incorrectly shows bright white in the upperside of the tail of Zenker's.

A consistently useful difference between the two species is the extent of white, or greyish-white, on the tail and undertail coverts. In Zenker's the white on the outer four pairs of feathers is largely restricted to the inner webs and is a dull greyish-white, or off-white, whereas in Yellow-footed the outer four pairs of tail feathers are predominantly a brighter white with dark only on the distal area of the outer, and to a lesser extent, the inner webs, of each feather (Plate 4). This point was made by Colston⁵. In the field, the closed tail of Yellow-footed looks largely white from the underside with dark grey-brown visible only in the centre and at the tips (this is clearly illustrated in the only published photograph of Yellow-footed Honeyguide taken in the field¹⁸). By contrast, the white in the tail of Zenker's can be extremely difficult to see. In forest light conditions the tail of Zenker's looks even duller than the true tones, which have been illustrated from skins and a live bird in the hand in Plate 4, so dull, in fact, that it can appear uniformly dark. For example, during prolonged views of Zenker's at Mount Kupe, both perched and in flight, white was rarely observed in the tail except at the moment of take-off, and even then it was still inconspicuous (CGRB). In our experience, most views of these species are from below and the differing amounts of white on the underside of the closed tail is thus a key identification criterion.

Overall, the first feature to look for once a bird is narrowed down to *Melignomon* is undoubtedly the prominence of white in the tail, and in our experience this is likely to be the easiest feature to check. Other features, such as the relative brightness of legs and upperparts are supporting points which will not always be easily discerned.

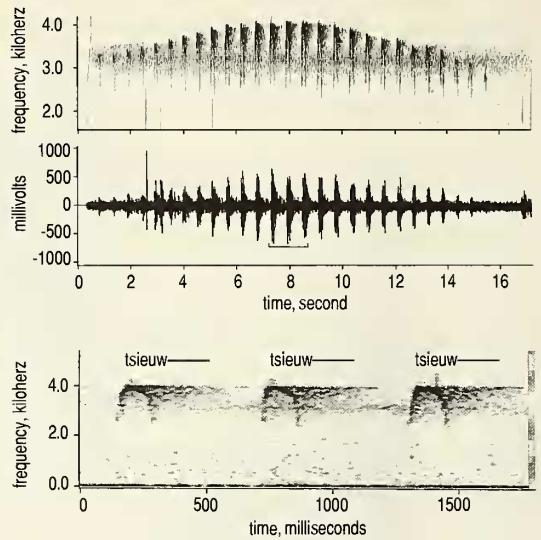


Figure 2 (top) Sonogram of song of Zenker's Honeyguide *Melignomon zenkeri*

Figure 3 (middle) Oscillogram of song of Zenker's Honeyguide *Melignomon zenkeri* (an oscillogram effectively shows the volume of a call. Eds)

Figure 4 (bottom) Expanded sonogram of part of song of Zenker's Honeyguide *Melignomon zenkeri* (position indicated on Fig 3)

Figure 2 (en haut) Sonogramme du chant de l'indicateur de Zenker *Melignomon zenkeri*

Figure 3 (au milieu) Oscillogramme du chant de l'indicateur de Zenker *Melignomon zenkeri* (un oscillogramme montre d'une manière frappante le volume des vocalisations. Eds)

Figure 4 (en bas) Sonogramme d'une partie du chant de l'indicateur de Zenker *Melignomon zenkeri* (indiqué à la Fig 3)

The song of Zenker's Honeyguide

Prior to recent observations on Mount Kupe the song of this species was apparently unreported. The bird sang while perched on thin horizontal branches and hanging creepers beneath the canopy, giving a distinctive series of calls which could be heard up to one kilometre away. So far, the song has been heard on eight occasions between 09.30 and 17.30hr, ie through the middle of the day, but it may well sing before 09.30hr, since there has been limited observer activity in the area before this time. Most persistent singing has been recorded in September and October, at the end of the wet season, but it has been heard right through the dry season too, up until April.

The song was taped by RPM on 21 October 1991 and a copy of this recording is deposited at the Library of Natural Sounds in London as *Melignomon zenkeri* LNS Catalogue no 55853. From this recording sonograms (Figures 2 and 4) and an oscillogram, (Figure 3) were prepared.

The song comprises a series of similar short, loud whistles, at a rate of two per second (Figure 4). There is a series of three to four more measured, quieter 'start-up' notes at the beginning which are delivered slightly more slowly and a similar tail-off effect during the closing three to four notes (Figures 2 and 3), during which the volume gradually diminishes until the song seems to have faded away (Figure 3). Pitch also increases slightly but to a recognisable peak in the middle of the song and thereafter declines gradually (Figure 2). The interval between series of notes varied between 20 seconds and 15 minutes. No other vocalisations were heard. The song is considered by CGRB to resemble the song of Thick-billed Honeyguide *Indicator conirostris* although it is higher-pitched and more rapidly delivered. That of Yellow-footed one would guess to be similar and should be listened out for, especially at the end of the wet season.

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Appendix

All known records of both species of *Melignomon* are tabulated below. Observers are cited separately where different from the author of the reference.

Yellow-footed Honeyguide

Location	Record	Year	Observer & ref
Babeke, Mamfe Division, SW Cameroon	Specimen	1956	1
Malende, Mt Cameroon, SW Cameroon	Specimen	1957	8
Mount Nimba, Liberia	Sighting	1964	Coe 18
Mount Nimba, Liberia	3 Specimens	1964-66	Coe and Yallah 18
Nimba Research Laboratory, Liberia	11 Specimens	1965-74	Forbes-Watson 18
Kakum Forest Reserve, Ghana	Sighting	1977	19
Mount Nimba, Liberia	Specimen	1980	Louette and Rigaux 6
Recent records			
Wemago, Gola East Forest Reserve, S. Leone	Sighting	1989	2
Wonegizi Mountains, Lofa, Liberia	Specimen	1990	Dickerman 20

Zenker's Honeyguide

Location	Record	Date	Observer & ref
Yaounde, S Cameroon	Specimens	1898	4
Bundimusuba, Bwamba, SW Uganda	Specimen	1967	16
Ouossi R. SE Central African Rep.			9
Kotili, Zaïre			9
Ibembo, Zaïre			9
Bolafa, Zaïre			9
Beni, Zaïre			9
Kaganda, Zaïre			9
Bobito, Zaïre			9
Bokala, Zaïre			9
Ebebiyin, NE Equatorial Guinea	Uncertain (lost)		16
Bitye, S Cameroon	10+ specimens		21
Esamesa, S Cameroon	Specimen	1908	21
Recent records			
Malende, Mt Cameroon, SW Cameroon	Sighting	1977	Forbes-Watson 13
Ndibi, S Cameroon	Mist-netted	1985	17
Lake Lobeke, S Cameroon	Mist-netted	1993	17
Mount Kupe, SW Cameroon	Mist-netted	1991-94	22
Mount Kupe, SW Cameroon	8 Sightings	1991-94	S.M. Andrews, CGRB, S. Keen, RPM, SHM, MWW

SHOEBILL • PRINCE RUSPOLI'S TURACO • QUAIL-PLOVER • BLACK-HEADED BEE-EATER • GRAUER'S WARBLER • MESITES
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